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**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA**

INVITAE CORPORATION,

Movant,

v.

SENTIEON, INC.,

Respondent.

Misc. Case No.: 5:22-mc-80281

[Related to Pending Action in the United States District Court for the United States District Court of Delaware Case Nos: 21-cv-669-GBW and 21-cv-1635-GBW]

**NON-PARTY SENTIEON INC.'S
OPPOSITION TO MOTION TO
COMPEL COMPLIANCE WITH
SUBPOENAS**

Date: December 6, 2022
Time: 10:00 a.m.
Location: Courtroom 2, 5th Floor
Judge: Hon. Virginia K. DeMarchi

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1 **I. INTRODUCTION**

2 Movant Invitae Corporation (“Invitae”) seeks to compel non-party Sentieon, Inc.
3 (“Sentieon”) to produce its most valuable asset—its proprietary and highly confidential source
4 code—and to also answer detailed questions about this source code several overbroad topics in a
5 deposition. ECF No. 1 (“Motion”). For the reasons below, the Court should deny Invitae’s Motion.

6 In the underlying patent lawsuits between Invitae and its competitor Natera Inc. (“Natera”)
7 (both of whom are Sentieon customers), Invitae’s infringement contentions relied on Natera’s
8 alleged use of the Genome Analysis Toolkit (“GATK”) in Natera’s Signatera test. GATK is free,
9 industry-standard, open-source genotyping software developed by the Broad Institute of MIT and
10 Harvard. In discovery, Natera alleged its Signatera test used Sentieon’s software, not GATK. But
11 Sentieon simply sells speed-optimized implementations of GATK. Sentieon’s proprietary software
12 has the same functionality and uses the same methods as the open-source GATK software. The
13 only difference is that it operates faster due to better programming—a fact irrelevant to Invitae’s
14 infringement allegations.

15 In June and July 2022, in response to Invitae’s subpoenas, Sentieon made a substantial
16 production of documents showing that Sentieon’s software had the same relevant functionality and
17 used the same mathematical methods as the open-source GATK software and that Natera and
18 Invitae were both fully aware of these similarities. Sentieon also offered to sign a declaration
19 attesting to these facts. This evidence permitted Invitae to continue to rely on its analysis of GATK
20 in alleging infringement, as it had since the outset. Additionally, whereas Sentieon’s highly
21 proprietary source code is extremely confidential and protected as a trade secret, the Broad
22 Institute’s GATK software is well-documented and readily available online.

23 For the next ten weeks, however, Invitae took no action—it did not take issue with
24 Sentieon’s production, work diligently on a draft declaration, or otherwise pursue the evidence it
25 now claims to need. Instead, just two business days before the October 4, 2022 claim construction
26 hearing in its patent suit against Natera, Invitae abruptly circulated a draft declaration for Sentieon
27 to review, only to unilaterally withdraw it moments after the Court issued its claim construction
28 order on October 18, 2022. Then, on October 25, 2022, just days before Invitae’s then-operative

1 deadline of November 1 to serve final infringement contentions, Invitae filed a motion to compel
 2 Sentieon to produce all of its source code and a witness to testify about its source code, among
 3 other topics.

4 The Court should deny Invitae’s motion for several reasons.

5 First, Sentieon protects its source code as a trade secret and Invitae has not demonstrated a
 6 “substantial need” for the information “that cannot be otherwise met without undue hardship.”
 7 Fed. R. Civ. P. 45(d)(3). Sentieon’s source code easily satisfies the test for trade secrets. Sentieon
 8 goes to great lengths to protect the secrecy of its source code, and Sentieon’s entire business model
 9 depends on this secrecy. Customers including Invitae and Natera pay to license Sentieon’s
 10 proprietary software rather than using the free, open-source, industry-standard GATK software
 11 because the programming techniques Sentieon uses to achieve speed benefits are kept secret.
 12 Invitae does not even attempt to establish this “substantial need,” and it is clear it has no such need,
 13 as Sentieon has already produced documents showing that its software is functionally and
 14 methodologically equivalent to the corresponding open-source software. Indeed, Invitae recently
 15 admitted to the Delaware Court that “*Sentieon software operates in the same manner as certain*
 16 *open-source software that is freely-available online*,” and thus Invitae’s infringement contentions,
 17 which cite the corresponding open-source software, “should suffice under all circumstances.”
 18 Decl. of Tim Byron (“Byron Decl.”) ¶ 4 & Ex. 3 (*Invitae v. Natera*, D.I. 89) at 2 (emphasis added).¹

19 Second, Invitae’s subpoenas are unduly burdensome. Its document subpoena seeks
 20 production of a mammoth amount of source code—more than 10 million lines. Its deposition
 21 subpoena requests testimony on several broad, disparate topics, including source code, the
 22 development process of the source code, and the design of Sentieon’s software. Forcing Sentieon
 23 to disclose its most valuable asset or prepare a witness to testify about these broad topics would
 24 impose substantial burdens on the company, requiring weeks of time and attention from several
 25 members of its 12-person team and frustrating their ability to complete numerous pressing projects.

26 ¹ All documents identified by “D.I.” refer to documents filed in the *Invitae v. Natera* actions. All
 27 documents identified by “ECF” refer to documents filed in the present miscellaneous action. In
 28 both cases, page numbers refer to the endorsed, ECF-printed page numbers in the document’s
 header.

1 Contrary to Invitae’s contention, the protective order in *Invitae v. Natera* would not mitigate
2 these concerns. Making source code available for inspection under the procedure set forth in the
3 protective order would be extremely costly and time-consuming for Sentieon. It would also require
4 Sentieon to engage counsel to closely monitor the *Invitae v. Natera* actions for months, if not years,
5 to ensure the parties, their attorneys, their experts, and their armies of support staff comply with
6 their obligations under the protective order. This counsel would need to attend trial and hearings
7 to ensure the court is sealed. This would place an enormous ongoing financial burden on Sentieon,
8 a non-party with no interest in being dragged into a dispute between two customers.

9 Third, Invitae has utterly failed to meet its obligation under Rule 45 to take “reasonable
10 steps to avoid imposing undue burden or expense” on a subpoenaed party. The fact that Sentieon’s
11 software operates in the same manner as the GATK open-source software could have been easily
12 established via first-party discovery with Natera, including, as Invitae has acknowledged, via
13 Natera’s own documents. Byron Decl. ¶ 4, Ex. 3 at 2. In its Motion, Invitae falsely suggests that
14 it could not obtain relevant information about Sentieon’s software from Natera because the court
15 in the Delaware actions ruled Natera need not produce any such information. The court did no such
16 thing—it merely found that Natera had not violated an early discovery deadline to produce “core
17 technical documents.” Moreover, Sentieon has already produced dozens of pages of documents
18 showing the relevant similarities between its own software and GATK, and it has repeatedly
19 expressed its willingness to sign a declaration stating the same. Additionally, although Invitae
20 contends that “hearsay” concerns taint Sentieon’s documents and proposed declaration, Invitae
21 acknowledges it is already working with a technical expert on infringement allegations, and the law
22 is clear that the facts and data underlying an expert’s opinion need not be admissible themselves
23 for the expert’s opinion to be admitted. Invitae also summarily rejected Sentieon’s proposal that
24 the requested information be provided via written deposition pursuant to Rule 31 of the Federal
25 Rules of Civil Procedure, even though there was ample time for this procedure when Sentieon’s
26 counsel suggested it. Indeed, even on the date of the filing of this opposition, there is ample time
27 before Invitae’s alleged December 19 deadline for Invitae to complete the Rule 31 process and
28 secure a written deposition from Sentieon. In short, rather than work diligently on less burdensome

alternatives to production of Sentieon’s confidential source code, Invitae sat on its hands for weeks and then rushed to court with an aggressive, overbroad motion. Indeed, rather than take steps to limit the scope of its eight disparate deposition topics to information Invitae actually needs for its case, Invitae seeks an order compelling a deposition on all eight topics, with no limitations whatsoever.

For these reasons and as discussed further below, the Court should deny Invitae’s Motion and quash its overbroad and unduly burdensome subpoenas. Moreover, because courts must impose appropriate sanctions on parties and attorneys who fail to comply with Rule 45’s requirement to take reasonable steps to avoid burdening a non-party, Sentieon respectfully requests the Court issue an order to show cause why sanctions should not issue against Invitae or set a deadline for Sentieon to file a motion for sanctions. *LegalZoom.com v. Rocket Law, Inc.*, 2015 WL 12832823, at *2 (N.D. Cal. Mar. 23, 2015) (denying motion to compel because movant failed to meet Rule 45 burden of establishing that it took “reasonable steps” to avoid imposing an undue burden on non-party and setting briefing schedule on respondent’s motion for sanctions).

II. BACKGROUND

A. Non-Party Sentieon and its Proprietary, Performance-Optimized Versions of Open-Source, Industry-Standard Software

This action concerns software for genetic sequencing and testing. The most widely used software for variant calling (the process of identifying variants from genetic sequence data) is a free, open-source software package developed by the Broad Institute of MIT and Harvard called the Genome Analysis Toolkit (“GATK”). Decl. of Jun Ye (“Ye Decl.”) ¶ 4. Source code and extensive documentation for GATK are available online on github.com. *Id.* The GATK package includes a tool for somatic variant calling named “MuTect2.” *Id.* GATK and MuTect2 are considered the industry gold standards—they are used widely throughout the genomics and biomedical industry. *Id.*

Sentieon develops and sells proprietary software that performs the same functionality and utilizes the same methods as these open-source tools, only faster. Ye Decl. ¶ 5. DNaseq is Sentieon’s performance-optimized version of the germline variant calling function in the Broad Institute’s GATK, and TNseq is Sentieon’s performance-optimized version of MuTect2. *Id.* The

1 only differences in how DNaseq and TNseq operate compared to their open-source counterparts
 2 pertain not to the underlying mathematical approach, but rather to optimizations that improve
 3 software performance. *Id.* These optimizations include using C/C++ programming (as opposed to
 4 Java used in GATK software), better parallelization of multi-cores in a CPU, and more efficient
 5 computing algorithms. *Id.*

6 Whereas GATK and MuTect2 are free, Sentieon charges licensing fees for the use of its
 7 performance-optimized software packages. Ye Decl. ¶ 6. Due to the critical importance of
 8 DNaseq and TNseq to Sentieon (it considers them to be the company’s “crown jewels”), Sentieon
 9 protects the source code for this software as a trade secret. *Id.* ¶ 7. Access to the source code is
 10 restricted to select full-time employees on a need-to-know basis and it is only permitted on select
 11 development computer servers that are protected by multi-factor authentication. All full-time
 12 employees of Sentieon have signed strict confidential information non-disclosure provisions as a
 13 condition of their employment. Independent contractors and temporary employees are never
 14 allowed to view Sentieon’s source code. Sentieon’s source code has never been allowed to be
 15 copied to any portable device. *Id.*

16 Sentieon does not share the source code of its software with its customers. *Id.* ¶ 8. Rather,
 17 Sentieon’s software is distributed to customers as compiled binary executables, similar to how
 18 Microsoft distributes its Microsoft Office suite. *Id.* This allows customers to run the binary
 19 executable on their computer servers (or on a cloud computing platform) without exposing
 20 Sentieon’s source code. *Id.* Sentieon’s software licensing agreements also require its customers to
 21 agree to “not reverse compile or decompile, disassemble, or otherwise reverse engineer” Sentieon’s
 22 software. Ye Decl. ¶ 8. Invitae and Natera are both Sentieon customers. *Id.* ¶¶ 8, 10, 11 & Ex. 1.

23 If Sentieon is ordered to allow a third-party expert to examine the source code of its DNaseq
 24 and TNseq software, it will be the first time ever in the company history that the source code is
 25 viewed by an outsider. Ye Decl. ¶ 9.

26 **B. Sentieon’s Customers Invitae and Natera Engage in Protracted Patent
 Litigation in Delaware**

27 Invitae and Natera are both genetics companies that offer genetic testing services.
 28 ECF No. 1-4 ¶¶ 2-5. They are also both long-term customers of Sentieon—Natera began using

1 Sentieon’s software in 2016, and Invitae began licensing Sentieon’s software in 2019. Ye Decl.
 2 ¶¶ 8, 10, 11 & Ex. 1.

3 Recently, Invitae and Natera have engaged in no-holds-barred, multi-front legal warfare in
 4 the District of Delaware. Natera initiated three patent infringement actions against companies that
 5 were subsequently acquired by Invitae. *See Natera, Inc. v. ArcherDX, Inc.*, Case Nos. 1:20-cv-
 6 00125 (D. Del. Jan. 27, 2020) & 1:20-cv-01047 (D. Del. Aug. 6, 2020); *Natera, Inc. v. Genosity*
 7 *Inc.*, Case No. 1:20-cv-01352 (D. Del. Oct. 6, 2020).² In response, Invitae commenced patent
 8 infringement lawsuits against Natera on November 21, 2021 and May 7, 2021. Case Nos. 1:21-cv-
 9 01635 & 1:21-cv-00669 (D. Del.) (collectively, “the Delaware actions” or “*Invitae v. Natera*”).
 10 The *Invitae v. Natera* actions, which are ongoing, led to the present action before this Court.

11 In *Invitae v. Natera*, Invitae accuses Natera’s Signatera test of infringing certain claims of
 12 the asserted patents. ECF No. 1-4 ¶¶ 19-22. In alleging certain claim limitations were satisfied,
 13 Invitae originally cited Natera’s use of GATK—the industry-standard, open-source software
 14 package developed by the Broad Institute—or “a method that implements a similar analysis.” *Id.*

15 Critically, Invitae’s sole theory of relevance of the Sentieon software is that it “implements
 16 a similar analysis” as GATK. *Id.* Invitae has never contended that Sentieon’s speed improvements
 17 over GATK are relevant to Invitae’s infringement allegations; nor has Invitae ever accused
 18 Sentieon of patent infringement. *See, e.g.*, ECF No. 1-19 at 2; Ye Decl. ¶ 12. Rather, as is common
 19 in patent infringement, Invitae relies on Natera’s use of well-known, industry-standard, prior-art
 20 methods and products to establish certain claim limitations. Sentieon’s software is merely
 21 implementation of the Broad Institute’s industry-standard variant calling methods.

22 The February 8, 2022 scheduling order entered by the court in *Invitae v. Natera* included
 23 several early discovery deadlines. Natera’s deadline to produce “core technical documents related
 24 to the accused products” was March 8, 2022, and Invitae’s deadline to produce infringement

25 ² In June 2020, Invitae announced it was acquiring ArcherDX. *See*
 26 <https://www.prnewswire.com/news-releases/invitae-and-archerdx-to-create-a-global-leader-in-comprehensive-cancer-genetics-and-precision-oncology-301080846.html>. In April 2021, Invitae
 27 announced it was acquiring Genosity. *See* [https://ir.invitae.com/news-and-events/press-releases/press-release-details/2021/Invitae-to-acquire-Genosity-to-accelerate-access-to-](https://ir.invitae.com/news-and-events/press-releases/press-release-details/2021/Invitae-to-acquire-Genosity-to-accelerate-access-to-personalized-oncology-testing-worldwide/default.aspx)
 28 [personalized-oncology-testing-worldwide/default.aspx](https://ir.invitae.com/news-and-events/press-releases/press-release-details/2021/Invitae-to-acquire-Genosity-to-accelerate-access-to-personalized-oncology-testing-worldwide/default.aspx).

contentions was April 15, 2022. Byron Decl. Ex. 1 ¶¶ 7(b) & 7(c)). The Court set a claim construction hearing for October 4, 2022, with Invitae’s final infringement contentions due 14 days after issuance of the court’s claim construction order. *Id.* ¶¶ 14, 16; 7(e).

C. Invitae Subpoenas Sentieon, and Sentieon Complies with the Subpoenas by Producing Relevant Documents and Offering to Sign a Declaration

Invitae issued deposition and document subpoenas to Sentieon on April 25, 2022. ECF Nos. 1-14, 1-15. Request No. 5 in Invitae’s document subpoena seeks “All versions of source code and any related documentation for any software used in Natera’s Signatera™ test, including but not limited to TNseq and DNaseq.” ECF No. 1-14 at 12. Invitae’s deposition subpoena includes eight broad topics:

1. Differences and similarities between Sentieon products and GATK, HaploTypeCaller, or MuTect2.
2. Any contract, agreement, or other understanding between Sentieon and Natera.
3. The design and operation of TNseq and DNaseq.
4. Communications with Natera regarding any Sentieon products.
5. Your knowledge of all documents and things provided to Natera by Sentieon regarding how Sentieon products function.
6. How Sentieon used GATK, HaploTypeCaller, or MuTect2 in the development of its products.
7. The design and operation of any Sentieon software provided to Natera and/or licensed by Natera.
8. Source code for any Sentieon software provided to Natera and/or licensed by Natera.

ECF No. 1-15 at 8.

Although Invitae alleges it subpoenaed Sentieon only after Natera refused to provide any information regarding its use of Sentieon’s software, the record does not support this claim.³ In fact, the motion to compel Invitae brought against Natera in the Delaware actions concerned Natera’s obligation to produce *core technical documents by an early court deadline*. ECF No. 1-13. Although the Delaware court denied Invitae’s motion, it never held that Natera did not have to

³ Indeed, the bulk of the factual allegations made in Invitae’s motion include no support whatsoever—the attorney declaration Invitae filed with its motion does not include a single factual allegation. *See, e.g.*, ECF No. 1-1.

1 produce any Sentieon documents or provide information about Sentieon via other forms of
 2 discovery; it merely held that Natera had satisfied its early-discovery burden to produce “core
 3 technical documents” by the March 8, 2022 deadline. ECF No. 1-2, 1-13 (denying motion to
 4 compel Natera to produce the “core technical documents related to the sequence analysis and
 5 assembly process in the accused products.”); *see also* Byron Decl. Ex. 1 ¶ 7(b). Notably, Invitae’s
 6 Motion nowhere addresses what steps it took to seek evidence regarding Natera’s use of Sentieon
 7 from Natera. Indeed, although Invitae claims Natera has provided “no information” about Sentieon,
 8 Invitae recently admitted to the Delaware court that Natera’s own documents “indicate[] that the
 9 Sentieon software operates in the same manner as certain open-source software that is freely-
 10 available online.” Byron Decl. Ex. 3 at 2.

11 Invitae and Sentieon met and conferred on the subpoenas on June 1, 2022. Byron Decl.
 12 Ex. 5. Contrary to Invitae’s claims that Sentieon served its objections and responses late, Invitae
 13 affirmatively agreed to extend the response and objection deadline to June 7. ECF No. 1-16. On
 14 June 7, 2022, Sentieon served its objections and responses to Invitae’s subpoenas. ECF Nos. 1-17
 15 & 1-18. Among numerous other objections, Sentieon objected to Invitae’s requests as vague,
 16 overbroad, and seeking its trade secret source code, and it refused to produce source code or a
 17 witness to testify about source code. *E.g.*, ECF No. 1-17 at 10-11, ECF No. 1-18 at 5-6. Sentieon
 18 agreed, however, to produce non-privileged documents showing the relationship between
 19 Sentieon’s software and the accused Broad Institute software. ECF No. 1-17 at 10-11.

20 On June 16, 2022, Sentieon produced documents in response to the subpoena which showed
 21 that Sentieon’s software was identical in functionality and methodology to GATK. For example,
 22 Sentieon produced:

- 23 • A printout of its website stating that DNaseq uses “identical mathematics as Broad
 24 Institute’s BWA-GATK Best Practice Workflow”; TNseq uses “identical mathematics
 25 as Broad Institute’s Mutect and MuTect2.”; DNaseq “matches GATK 3.3-4.1 and
 26 without downsampling”; TNseq “Matches MuTect, MuTextt2 v3.8-4.1 without
 27 downsampling”; and DNaseq “was built on the solid foundation of the most rigorous
 28 and most extensively tested and validated mathematical models used in the Broad

Institute’s Best Practices Workflow, but with more efficient computing algorithms and an enterprise-strength software implementation.” Ye Decl. ¶ 13 & Ex. 2.

- Documentation provided to customers explaining how to use Sentieon’s software to conform with Broad Institute GATK Best Practices. *Id.* Ex. 3.
- An article published in Nature Medicine and co-authored by *a Natera researcher* which described Sentieon’s software as an “implementation” of GATK. *Id.* Ex. 4.
- An article co-authored by *an Invitae researcher* describing Sentieon’s software as “designed to give the same results more efficiently than GATK.” *Id.* Ex. 5.
- Numerous other documents Sentieon’s software uses the same mathematical methods and algorithms as GATK and produce equivalent results. *Id.* Ex. 6 (“Sentieon tools produce equivalent results to GATK/MuTect/MuTect2 suite of tools by using mathematical methods identical to the Broad Institute’s Best Practice Workflow pipeline”); Ex. 7 (“Sentieon uses the same algorithms as GATK and reliably puts out new releases in response to GATK version updates.”).
- Correspondence between Sentieon and Natera, including software license agreements for Sentieon software. *See* ECF No. 1 at 9; Ye Decl. Ex. 1.⁴

Notwithstanding this substantial production, Invitae complained about Sentieon’s documents, falsely claiming that they consisted “primarily of marketing materials that show the capability of Sentieon products, not how they work.” ECF No. 1-19 at 10. Although Sentieon strongly disagreed with Invitae’s assertions, on July 1, 2022, Sentieon produced more documents, and its counsel explained how Sentieon’s production was fully responsive to Invitae’s discovery requests and fully addressed Invitae’s alleged needs:

In sum, these documents show that Sentieon’s DNaseq and TNseq match GATK Haplotyper and MuTect2 (the functionality accused in Invitae’s Complaint), respectively, using the same methods and mathematics. The differences are only in software engineering to run faster in computers, through C/C++ programing (GATK Haplotyper and MuTect2 use Java), better parallelization to use multi-cores in a CPU, and removing redundancy.

⁴ To reduce costs, Sentieon is not submitting all documents it produced to Invitae with this opposition, but rather only those that can be filed publicly, including redacted copies of the Natera licenses. On request, Sentieon will lodge all documents produced to Invitae for *in camera* review.

1 ECF No. 1-19 at 6-8.

2 Although it was under no obligation to do so, Sentieon’s counsel also provided detailed
3 descriptions of each document Sentieon had produced, explaining how each was relevant and where
4 in the document to find relevant information. ECF No. 1-19 at 6-8. Sentieon’s counsel also directed
5 Invitae to the publicly available source code for GATK corresponding to DNaseq and TNseq, as
6 well as detailed documentation for GATK. *Id.*

7 Sentieon and Invitae met and conferred again on July 14, 2022. ECF No. 1-19 at 2-3. On
8 July 15, 2022, Sentieon reiterated once again that it would not be producing source code, noting
9 that it was “the product on which its business is based.” *Id.* Sentieon’s counsel also stated that it
10 had already produced documents showing that Sentieon’s DNaseq and TNseq matched “GATK
11 Haplotyper and MuTect2 (the functionality accused in Invitae’s Complaint), respectively, using the
12 same methods and mathematics.” *Id.* Sentieon’s counsel wrote that it had also “provided links to
13 the publicly available source code and documentation from which those methods and mathematics
14 can be derived, and which does not implicate Sentieon’s highly confidential and competitively
15 sensitive source code.” *Id.* In view of these disclosures and this publicly available source code,
16 Sentieon’s counsel stated that there was no basis for Invitae to continue to demand its source code:

17 Sentieon’s software engineers wrote instructions that save computer
18 time and resources in executing the same methods and mathematics
19 in GATK Haplotyper and MuTect2. ***We are not aware of, and
20 Invitae was not able to identify, any asserted claim of the patents
that Invitae has accused Natera of infringing that depends on the
way that the instructions to the computer are written, as opposed to
the methods and mathematics implemented by those instructions.***

21 *Id.* at 2 (emphasis added).

22 As a compromise, Sentieon’s counsel invited Invitae to draft a declaration in which Sentieon
23 would attest to these above facts. *Id.* at 2.

24 Although Invitae claims it promptly shared a draft declaration, it did not do so. As discussed
25 above, the claim construction hearing in the Delaware actions was scheduled for October 4, 2022,
26 with final infringement contentions due 14 days after issuance of the court’s claim construction
27 order. Byron Decl. Ex. 1 ¶ 16. Thus, even as of July 15, 2022, time was of the essence for Invitae.
28 If Invitae truly needed evidence to finalize its infringement contentions, it should have worked

1 quickly to prepare a draft declaration and secure Natera's agreement as to its admissibility. But
 2 rather than working diligently, *ten weeks of radio silence followed*. Invitae did not share a draft
 3 declaration with Sentieon or otherwise communicate with it again until *September 29, 2022—just*
 4 *two business days before the claim construction hearing in the Delaware actions*. See ECF No
 5 1-20 at 3-4; Byron Decl. ¶ 2 & Ex. 1 ¶¶ 14, 16; 7(e).

6 On October 18, 2022, the Delaware court issued its claim construction order, triggering a
 7 deadline of November 1, 2022 for Invitae's final infringement contentions under the operative
 8 scheduling order. Byron Decl. ¶¶ 1-2 & Ex. 2, Ex. 1 ¶ 16. That same day, Invitae informed Sentieon
 9 that Natera opposed use of the declaration at trial and withdrew it, once again demanding
 10 production of source code and a deposition, notwithstanding the fact that its deadline to finalize its
 11 invalidity contentions was only 14 days away. ECF No. 1-20 at 2-3.

12 On October 21, 2022, Invitae wrote to the court in the Delaware actions, requesting an
 13 extension of November 1, 2022 deadline to finalize infringement contentions to January 20, 2023
 14 to allow Invitae to file a motion to compel Sentieon. Byron Decl. ¶ 4 & Ex. 3. Four days later,
 15 before receiving a response from the court, Invitae filed its motion to compel in this District. ECF
 16 No. 1. On October 26, 2022, the Clerk set a hearing on Invitae's motion for December 6, 2022.
 17 ECF No. 3. Invitae used this December 6 hearing date to its benefit—at an October 27, 2022
 18 conference in the Delaware actions, Invitae cited this hearing date as a reason Invitae needed an
 19 extension of its deadline to finalize infringement contentions, and on that basis, the Court extended
 20 the deadline to December 19, 2022. Byron Decl. ¶ 5 & Ex. 4.

21 On November 2, 2022, counsel for Invitae and Sentieon met and conferred once again on
 22 the motion to compel. Byron Decl. ¶¶ 9-10. Sentieon's counsel reiterated that production of source
 23 code and a witness would be extremely burdensome. *Id.* As an alternative, counsel for Sentieon
 24 proposed a deposition by questions pursuant to Rule 31 of the Federal Rules of Civil Procedure,
 25 stating that this would be an alternative to the written declaration the parties had considered that
 26 would not require Natera's consent. *Id.* Counsel for Invitae rejected this proposal, claiming that
 27 there was not enough time for this procedure. *Id.* Counsel for Sentieon disputed this claim, walking
 28 Invitae's counsel through the language of Rule 31 to show that if Invitae served the subpoena that

1 day, it would be possible for written responses to be provided by December 2, before the noticed
 2 hearing date on Invitae’s motion and well before Invitae’s December 19 deadline to amend its
 3 infringement contentions. *Id.* Counsel for Invitae responded that he simply did not want to use a
 4 Rule 31 deposition to prove Invitae’s case. *Id.* Invitae refused to consider anything short of
 5 Sentieon’s immediate production of its source code and a deposition on the noticed deposition
 6 topics. *Id.*

7 In summary, Sentieon engaged in three meet-and-confers with Invitae; exchanged
 8 numerous formal letters; conducted a significant internal investigation to ensure its compliance
 9 with its third-party discovery obligations; provided Invitae with documentation showing how
 10 Sentieon’s software performs the same functionality and methodology as GATK; produced
 11 evidence showing Natera and Invitae both knew of this identical functionality and methodology;
 12 produced correspondence and licenses between Sentieon and Natera; directed Invitae to relevant,
 13 publicly available open-source code that corresponded to Sentieon’s confidential source code;
 14 agreed to sign a declaration in lieu of producing source code or a deposition witness; and proposed
 15 a Rule 31 deposition in lieu of source code review and an oral deposition. Indeed, by the time
 16 Invitae had filed its motion, Sentieon had already incurred more than \$50,000 in attorneys’ fees
 17 responding to Invitae’s subpoenas—more than five times the company’s total spend on legal fees
 18 for the previous year. Ye Decl. ¶ 17. Meanwhile, Invitae did not meaningfully narrow its
 19 subpoenas at all or take any other steps to avoid imposing undue burden or expense on non-party
 20 Sentieon from its onerous discovery requests. Today, as in April 2022, Invitae still seeks
 21 production of substantially all DNaseq and TNseq source code and a deposition witness to answer
 22 questions about eight extremely broad topics, including its source code, making no concessions
 23 whatsoever on the scope of these deposition topics.

24 **III. INVITAE HAS FAILED TO SATISFY RULE 45’S “SUBSTANTIAL NEED” TEST**
FOR SENTIEON’S HIGHLY SENSITIVE, CONFIDENTIAL INFORMATION

25 To obtain “trade secret or other confidential research, development, or commercial
 26 information” from a non-party, a subpoenaing party must demonstrate “substantial need” for the
 27 information “that cannot be otherwise met without undue hardship.” Fed. R. Civ. P. 45(d)(3). After
 28 the non-party shows that the requested material is confidential, the burden shifts to the requesting

1 party to demonstrate substantial need. *Waymo LLC v. Uber Techs., Inc.*, 2017 WL 3581171, *1
 2 (N.D. Cal. Aug. 18, 2017). Substantial need “is particularly important in the context of enforcing
 3 a subpoena when discovery of trade secret or confidential commercial information is sought from
 4 non-parties.” *Gonzales v. Google, Inc.*, 234 F.R.D. 674, 685 (N.D. Cal. 2006). Courts have liberal
 5 discretion to quash a subpoena that seeks disclosure of such information. Fed. R. Civ. P.
 6 45(d)(3)(B).

7 Invitae’s subpoenas seek the production of Sentieon’s highly confidential and proprietary
 8 business information—indeed, its most valuable asset. Sentieon protects its source code as a trade
 9 secret. Ye Decl. ¶ 7. Access to Sentieon source code is restricted to selected full-time employees
 10 on a need-to-know basis and only on selected development computer servers protected by multi-
 11 factor authentication. *Id.* Independent contractors and temporary employees are never allowed to
 12 view Sentieon’s source code. *Id.* All full-time employees of Sentieon have signed strict
 13 confidential information non-disclosure agreement as part of the employment agreement. *Id.* ¶ 7.
 14 Moreover, Sentieon never shares the source code of its software with its customers. *Id.* ¶ 8. Rather,
 15 Sentieon’s software is distributed to customers as compiled binary executables, which allow
 16 customers to run the software without exposing Sentieon’s source code. *Id.* Sentieon’s software
 17 licensing agreements also require its customers to agree to “not reverse compile or decompile,
 18 disassemble, or otherwise reverse engineer” Sentieon’s software. *Id.* If Sentieon is ordered to
 19 make its source code available for inspection by Invitae and Natera, it will be the first time in the
 20 company’s history that it is viewed by an outsider. *Id.* ¶ 9.

21 Invitae asserts Sentieon’s source code is relevant to the *Invitae v. Natera* action because
 22 Natera’s Signatera test allegedly utilizes Sentieon software. But it is undisputed that Sentieon’s
 23 software has the same functionality and uses the same methods as the open-source GATK
 24 software—the only difference is that it operates faster due to better programming. Sentieon’s speed
 25 improvements over GATK are irrelevant to Invitae’s claims, and Invitae has never accused
 26 Sentieon’s software of infringement. Indeed, just days before filing its motion, Invitae admitted to
 27 the court in the Delaware action that “*Sentieon software operates in the same manner as certain*
 28 *open-source software that is freely-available online,*” and thus Invitae’s infringement contentions,

1 which reference the open-source software rather than Sentieon’s software, “should suffice under
2 all circumstances.” Byron Decl. Ex. 3 at 2 (emphasis added).

3 More importantly, even if Sentieon’s source code were relevant to Invitae’s infringement
4 claims against Natera, mere relevance is not enough. Invitae cannot obtain Sentieon’s confidential
5 information without demonstrating a “substantial need” for the material. Fed. R. Civ. P. 45(d)(3);
6 *In re eBay Seller Antitrust Litig.*, 2009 WL 10677051, at *5 (W.D. Wash. Aug. 17, 2009) (“[E]ven
7 though the competitively sensitive documents Plaintiffs seek might have some relevance, Plaintiffs
8 must do a substantially better job articulating their need for them.”). Invitae’s Motion neither cites
9 this standard nor makes any attempt to meet it. To the contrary, Invitae effectively concedes it does
10 not have a substantial need for Sentieon’s source code, in view of the above admission to the
11 Delaware court that its infringement contentions citing GATK “should suffice under all
12 circumstances.” Byron Decl. Ex. 3 at 2. In view of Invitae’s own admissions, the fact that
13 Sentieon’s speed improvements over GATK are irrelevant to Invitae’s claims and also highly
14 confidential, and the existence of the Broad Institute’s freely available analogous open-source code,
15 Invitae has failed to demonstrate a substantial need for Sentieon’s source code.

16 **IV. INVITAE’S SUBPOENAS ARE UNDULY BURDENSOME**

17 In issuing a subpoena to a non-party, the subpoenaing party “must” “avoid imposing undue
18 burden or expense.” Fed. R. Civ. P. 45(d)(1). The Court “must enforce this duty and impose an
19 appropriate sanction . . . on a party or attorney who fails to comply.” *Id.* Further, the Court “must
20 quash or modify a subpoena that . . . subjects a person to undue burden.” *Id.* 45(d)(3)(A).

21 The Federal Rules “afford nonparties special protection against the time and expense of
22 complying with subpoenas” and “give ample discretion to district courts to quash or modify
23 subpoenas causing undue burden.” *Exxon Shipping Co. v. U.S. Dep’t of Interior*, 34 F.3d 774, 779
24 (9th Cir. 1994); *Lemberg Law LLC v. Hussin*, 2016 WL 3231300, at *5 (N.D. Cal. June 13, 2016)
25 (granting motion to quash overbroad subpoena and noting that “[t]he Ninth Circuit has long held
26 that nonparties subject to discovery requests deserve extra protection from the courts.”). This is in
27 part because “[n]onparty witnesses are powerless to control the scope of litigation and discovery,”
28 *United States v. Columbia Broad. Sys., Inc.*, 666 F.2d 364, 371 (9th Cir. 1982), and have “no dog

1 in th[e] fight.” *Cusumano v. Microsoft Corp.*, 162 F.3d 708, 717 (1st Cir. 1998) (citing *Dart Indus.*
 2 *Co. v. Westwood Chem. Co.*, 649 F.2d 646 (9th Cir. 1980)).

3 “[P]arties to a lawsuit must accept [the burdens of discovery] as a natural concomitant of
 4 modern civil litigation. Non-parties have a different set of expectations” such that the “concern for
 5 the unwanted burden thrust upon non-parties is a factor entitled to special weight in evaluating the
 6 balance of competing needs.” *Cusumano*, 162 F.3d at 717 (affirming denial of motion to compel
 7 non-party in antitrust suit to produce sensitive materials).

8 “Underlying this protection is the understanding that, the word ‘non party’ serves as a
 9 constant reminder of the reasons for the limitations that characterize ‘third party’ discovery.”
 10 *Beinin v. Ctr. for Study of Popular Culture*, 2007 WL 832962, at *2 (N.D. Cal. Mar. 16, 2007). “A
 11 court keeps this distinction between a party and nonparty in mind when it determines the propriety
 12 of a nonparty’s refusal to comply with a subpoena by balancing the relevance of the discovery
 13 sought, the requesting party’s need, and the potential hardship to the party subject to the subpoena.”
 14 *Id.* (denying motions to compel because subpoenas were unduly burdensome).

15 Here, Invitae is seeking the production of a mammoth amount of source code from non-
 16 party Sentieon. Document Request No. 5 seeks “[a]ll versions of source code and any related
 17 documentation for any software used in Natera’s Signatera [tm] test, including but not limited to
 18 TNseq and DNaseq.” ECF No. 1-14 at 12. Sentieon, however, is unable to limit its production to
 19 the software Natera *used* because Sentieon has no idea which versions, or which products, of
 20 Sentieon’s software package were used by Natera—it only knows Natera has licensed the entire
 21 Sentieon software package from Sentieon. Ye Decl. ¶ 14. Natera has had access to this software
 22 package since 2016. *Id.* ¶ 10. Since then, Sentieon has made seven major releases of its software
 23 available to Natera. Collectively, these major releases include 38 sub-releases. *Id.* ¶ 15. Combined,
 24 this amounts to more than 10 million lines of code. *Id.* ¶ 15.⁵ This number is similar to the amount
 25 of code GATK has made public over the same time period. GATK’s most recent release has

26
 27 ⁵ This number includes not only code for DNaseq and TNseq, but also code for Sentieon’s other
 28 licensed products. All of Sentieon’s products share the same codebase, however, as many modules
 are shared across different products. Thus, there is no practical way for Sentieon to single out
 DNaseq and TNseq’s lines of code. Ye Decl. ¶ 15.

1 roughly 460,000 lines of code, and GATK has issued 48 releases since early 2018. *Id.* ¶ 16.

2 In short, Sentieon has already satisfied its obligations under the subpoenas by producing
3 numerous documents demonstrating that its software is equivalent in functionality and
4 methodology to GATK and that Natera and Invitae are aware of this fact, as well as correspondence
5 and licenses with Natera. It has also directed Invitae to the corresponding GATK/Mutect2 source
6 code and documentation freely available on github.com.

7 It would be extremely burdensome for Sentieon to produce source code or a deponent to
8 answer questions about its source code or otherwise address the eight broad deposition topics.
9 Under Federal Rule of Civil Procedure Rule 45, a court may quash a subpoena that requires the
10 disclosure of confidential commercial information. Fed. R. Civ. Proc. 45(d)(3)(B)(i) (court may
11 quash or modify a subpoena that requires “disclosing a trade secret or other confidential research,
12 development, or commercial information”); *see also* Fed. R. Civ. P. 26(c)(1)(G) (court may enter
13 an order requiring that “confidential research, development, or commercial information not be
14 revealed”). The Court should do so here.

15 Invitae incorrectly contends that the existence of a protective order in *Invitae v. Natera* fully
16 addresses Sentieon’s security concerns. While a protective order may mitigate security concerns
17 for *parties*, it does little to eliminate the security risk that a *non-party* assumes by producing source
18 code in litigation. *See, e.g., Realtime Data, LLC v. MetroPCS Texas, LLC*, 2012 WL 1905080, at
19 *3 (S.D. Cal. May 25, 2012) (denying motion to compel non-party production of source code,
20 noting a non-party’s “concerns regarding the security of its source code, despite the protective order,
21 cannot be ignored”).

22 Here, making Sentieon’s source code available under the protective order would place
23 immense costs on Sentieon—a 12-person company—without meaningfully protecting Sentieon’s
24 source code. In recognition of the highly sensitive nature of source code, the protective order sets
25 forth a complicated and costly source code review process. ECF No. 1-23 at ¶¶ 12.1-12.2. Under
26 the protective order, source code is not simply “produced” in discovery. Rather, source code is
27 made available for inspection via a secure computer in a secured room without Internet or network
28 access at the office of the producing party’s counsel. *Id.* The producing party is permitted to

1 visually monitor the activities of the receiving party’s representatives to ensure no electronic copies
2 of the source code are made. *Id.* While the receiving party may request paper copies of limited
3 portions of source code as necessary for court filings, it may not request copies of source code for
4 review elsewhere “in the first instance,” *i.e.*, as an alternative to reviewing source code
5 electronically on the source code computer. *Id.* In other words, the slow, painful process of
6 reviewing source code must be performed entirely in a secured room on a secured computer under
7 the monitoring of the producing party.

8 Invitae ignores this entire procedure in its motion, seemingly seeking a court order that
9 would require Sentieon to forgo these important protections, simply put its source code on a thumb
10 drive, and hand it over to Invitae’s counsel. It would be patently unfair for Invitae to cite the
11 existence of the protective order to argue no burden exists and then seek an order that requires
12 Sentieon to forego its protections. To avail itself of the source code protections Invitae and Natera
13 insist on for their own source code, Sentieon would need to: (1) collect all the source code; (2) put
14 it on an air-gapped computer (*i.e.*, one with no network interfaces, either wired or wireless,
15 connected to outside networks); (3) establish a room as a “secured room”; (4) hire a professional to
16 monitor the process, keep a record of individuals who have inspected source code, and provide
17 technical support; and (5) have an attorney at the ready to challenge the amount of source code
18 requested in hard copy form, if a dispute arises. And because there are millions of lines of code at
19 issue, the entire source code review process is likely to take significant time. Sentieon’s source
20 code is not well documented, and it is arranged differently than GATK. Ye Decl. ¶ 19. Sentieon
21 estimates that it would take its own engineers several weeks to identify the specific lines of code
22 that are potentially relevant to *Invitae v. Natera*—it would take Invitae and Natera considerably
23 longer. *Id.*

24 Producing source code pursuant to the protective order would therefore place an immense
25 financial burden on Sentieon, a small company that is not a party to the lawsuit and that had already
26 incurred more than \$50,000 in attorneys’ fees in responding to Invitae’s subpoena before Invitae
27 filed its motion to compel. Byron Decl. ¶ 7; Ye Decl. ¶¶ 17-18.

28 Moreover, the burdens on Sentieon would not stop after this time-consuming and expensive

1 source-code review process concluded. Sentieon’s source code will be quoted or summarized in
 2 myriad court documents and attorney work product, including infringement contentions, expert
 3 reports, deposition transcripts, demonstratives, and other court documents. While a party to a
 4 lawsuit has a natural opportunity to monitor the use of its source code in such documents, non-party
 5 Sentieon does not. Despite having no interest in the Delaware actions, Sentieon would need to
 6 continually monitor them, carefully reviewing infringement contentions, expert reports, deposition
 7 transcripts, and other court documents to ensure its source code is properly protected under the
 8 protective order. It would need to attend trial and hearings to ensure the courtroom is sealed when
 9 the topic of Sentieon’s software is raised. And because these documents and court events will
 10 almost certainly involve materials marked highly confidential-attorneys’ eyes only by the parties,
 11 Sentieon would need to engage an outside attorney with patent litigation experience to perform this
 12 monitoring. Ye Decl. ¶ 18, 21. This could easily cost hundreds of thousands of dollars—a
 13 tremendous ongoing burden for a non-party that has no stake in Invitae’s and Natera’s patent
 14 warfare and that spent less than \$10,000 on attorney-related costs in 2021. *Id.* ¶ 17. Moreover,
 15 even after final disposition of this matter, counsel for the parties would be permitted to retain
 16 archival copies of all pleadings, motion papers, attorney work product, and consultant and expert
 17 work product. ECF No. 1-23 ¶ 18.1. Thus, even if a judgment is entered, Sentieon would need to
 18 be vigilant to ensure counsel for Invitae and Natera comply with their obligations under the
 19 protective order (which includes a bar on patent prosecution, *see* ECF No. 1-23 ¶ 8.1).

20 Finally, Invitae and Natera are both customers of Sentieon. Numerous courts have held that
 21 a protective order is insufficient to allow one party access to a non-party *competitor’s* sensitive,
 22 confidential materials. *See, e.g., Waymo*, 2017 WL 2929439 at *3 (“Defendants’ suggestion that
 23 the protective order covering this case ameliorates any confidentiality concerns, and that the non-
 24 party ‘may limit disclosure only to outside counsel of record’ . . . is unavailing.”). Courts are
 25 equally protective of a non-party’s confidential information when its disclosure would “cause
 26 substantial economic harm” to the non-party’s competitive position vis-à-vis the parties in the case.
 27 *See DISH Network, L.L.C. v. WNET*, 2014 WL 1628132, at *4 (D. Colo. Apr. 24, 2014). This is
 28 the case here, as Invitae and Natera have both entered into license agreements which prohibit them

1 from accessing Sentieon's source code. Allowing Invitae to now access the very source code that
2 it contractually agreed not to access would inevitably alter its competitive position with Sentieon
3 for any future negotiations.

4 The case law Invitae relies on is easily distinguishable. The court in *eDirect Publ'g, Inc. v.*
5 *LiveCareer, Ltd.* ordered production of source code in part because the respondent had failed to
6 provide any details supporting its claims that its source code was confidential and "submitted no
7 sworn testimony providing a concrete or particularized assessment of the costs or risks of the
8 requested production." 2014 WL 2527401, at *2 (N.D. Cal. June 4, 2014). That is not the case
9 here—Sentieon has provided detailed evidence supporting its claim that its source code is a trade
10 secret. Moreover, the respondent was the original assignee of both asserted patents, and the source
11 code at issue was 11-14 years old. Here, Invitae seeks production of cutting-edge software it itself
12 licenses. Similarly, in *Optimize Tech. Sols., LLC. v. Staples, Inc.*, there is no indication the
13 respondent protected its source code as a trade secret or argued it would be burdensome to produce.
14 2014 WL 1477651, at *2 (N.D. Cal. Apr. 14, 2014).

15 Invitae also has refused to take any steps to reduce the burden of producing a witness for a
16 deposition. Its eight noticed deposition topics are vague, wildly overbroad, and seek information
17 that has no relevance to the Delaware action. Topics 1, 3, and 6-8 all concern the operation of
18 Sentieon's software and its source code. Moreover, they go beyond source code to inquire into the
19 development of that source code (Topics 3, 6 and 7) and the similarities and differences between
20 Sentieon's software and source code and GATK's software (Topics 1 and 6). Invitae has never
21 been willing to identify the specific accused functionality in GATK and agree to limit a deposition
22 to questions about that functionality.

23 Topics 2, 4, and 5 all concern communications between Sentieon and Natera. Natera has
24 already admitted it licensed Sentieon's software and uses it in its Signatera test as an alternative to
25 GATK, and Sentieon has produced all licenses, correspondence, and documentation in its
26 possession, custody, or control. Invitae has never attempted to explain why it needs a Sentieon
27 witness to answer questions about these topics in view of these facts. Invitae has never proposed
28 limiting this topic to authentication of these documents, but to the extent authentication is the issue,

1 these business records can be authenticated via business records affidavit pursuant to Rules 902(11)
2 and 803(6) of the Federal Rules of Evidence, obviating the need for a burdensome deposition.

3 Producing a deponent on these eight disparate topics would be extremely burdensome
4 because there is no one witness at Sentieon knowledgeable enough to testify about all of them. Ye
5 Decl. ¶ 22. Questions about Sentieon’s relationship with and communications with Natera would
6 require the knowledge of Sentieon’s business development person, who is not based in the Bay
7 Area and travels frequently. *Id.* Technical questions about Sentieon’s software encompass
8 different functions written by different engineers, and one of them is a former employee who no
9 longer has any contact with Sentieon. *Id.* Thus, to produce a single witness on these technical
10 issues would require one engineer to read and digest code written and developed by other engineers,
11 as well as a great deal of gueswork. Moreover, numerous topics require knowledge not only of
12 Sentieon’s source code, but also of the historical development of that code, such as Topic 3 (“The
13 design and operation of TNseq and DNaseq”), Topic 6 (“How Sentieon used GATK,
14 HaplotypeCaller, or MuTect2 in the development of its products”), Topic 7 (“The design and
15 operation of any Sentieon software provided to Natera and/or licensed by Natera”), and Topic 8
16 (“Source code for any Sentieon software provided to Natera and/or licensed by Natera”). These
17 topics would also require a witness knowledgeable about the *Invitae v. Natera* action, including
18 knowledge of *Invitae*’s infringement contentions and the Court’s claim construction ruling in that
19 action. *Id.* All in all, these eight topics would require significant attention from more than half of
20 Sentieon’s 12-person staff. *Id.*

21 It would be a considerable burden to produce a witness on eight noticed topics. And the
22 test for undue burden balances “the burden to the subpoenaed party against the value of the
23 information to the serving party” *AngioScore, Inc. v. TriReme Med., Inc.*, 2014 WL 6706873,
24 at *2 (N.D. Cal. Nov. 25, 2014) (*citing Moon v. SCP Pool Corp.*, 232 F.R.D. 633, 637 (C.D. Cal.
25 2005)). Other than discuss its alleged need for source code, *Invitae* makes no attempt in its Motion
26 to explain the value of testimony on the eight deposition topics. For these reasons, the Court should
27 deny *Invitae*’s Motion.

V. **INVITAE’S SUBPOENAS AND MOTION TO COMPEL VIOLATE RULE 45’S REQUIREMENT THAT A PARTY TAKE REASONABLE STEPS TO AVOID BURDENING A NON-PARTY**

A party seeking to enforce a subpoena has a burden to show it took “reasonable steps” to avoid burdening a non-party. Fed. R. Civ. P. 45(c)(1) (“A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena”); *LegalZoom.com v. Rocket Law, Inc.*, No. 12-CV-00942 GAF, 2015 WL 12832823, at *2 (N.D. Cal. Mar. 23, 2015) (denying motion to compel because movant failed to meet its burden of establishing that it took “reasonable steps” to avoid imposing an undue burden on non-party); *High Tech Med. Instrumentation, Inc. v. New Image Indus., Inc.*, 161 F.R.D. 6, 88 (N.D. Cal. 1995) (sanctioning movant and noting, “nonparties subject to discovery requests deserve extra protection from the courts”). “A court keeps this distinction between a party and nonparty in mind when it determines the propriety of a nonparty’s refusal to comply with a subpoena by balancing the relevance of the discovery sought, the requesting party’s need, and the potential hardship to the party subject to the subpoena.” *Beinin v. Ctr. for the Study of Popular Culture*, 2007 WL 832962, at *6 (N.D. Cal. Mar. 16, 2007) (internal quotation marks omitted).

Here, the record is clear that Invitae has not met this burden—on the contrary, Invitae has repeatedly shown a complete disinterest in avoiding burden to Sentieon.

There are a multitude of less burdensome ways for Invitae to establish that Sentieon’s software has the same functionality and uses the same methods as the Broad Institute’s GATK software. First, Invitae could have sought evidence to establish this basic and undisputed fact from the defendant, Natera, via depositions, document requests, requests for admission, and other first-party discovery methods. Although Invitae argues Natera has refused to provide information regarding its use of Sentieon’s software in the Delaware actions, the record does not support this claim. As discussed in Section II.B, above, the motion to compel Invitae brought against Natera was focused on Natera’s March 8, 2022 deadline to produce “core technical documents.” The Court never held that Natera did not have to produce *any* Sentieon documents or provide information about Sentieon via other form of discovery; it merely held that Natera had satisfied its early-discovery burden to produce “core technical documents” by the early deadline. Invitae does not

1 address what steps it took to secure evidence regarding Natera's use of Sentieon from Natera,
2 although it admitted to the Delaware court that Natera's own documents "indicate[] that the
3 Sentieon software operates in the same manner as certain open-source software that is freely-
4 available online." Byron Decl. Ex. 3 at 2.

5 Second, Invitae could have relied on the ample documentary evidence Sentieon produced
6 in response to the subpoena showing that DNaseq and TNseq use the same methods and
7 mathematics as the Broad Institute's software. Indeed, it could have used this evidence in first-
8 party discovery with Natera, securing admissions from its witnesses that Sentieon's software uses
9 the same methods and mathematics as GATK.

10 Third, Invitae could have chosen to use expert testimony to establish the fact that Sentieon's
11 software and the corresponding Broad Institute software are equivalent for purposes of Invitae's
12 infringement allegations. Sentieon has produced a wealth of scholarly articles showing these
13 equivalencies—it is well within the ambit of technical experts to base opinions on such documents,
14 as well as their existing knowledge about the field. Although Invitae contends Sentieon's
15 documents are inadmissible hearsay, Federal Rule of Evidence 703 is clear that the facts and data
16 underlying an expert's opinion need not be admissible themselves for the opinion to be admitted.
17 *See also Inline Conn. Corp. v. AOL Time Warner Inc.*, 470 F. Supp. 2d 435, 443 (D. Del. 2007)
18 (denying motion to exclude expert reports on hearsay grounds because "[e]ven if the information
19 upon which the experts rely is inadmissible, their opinions and inferences are admissible.").

20 Fourth, Invitae could have worked diligently to secure a declaration with this information
21 from Sentieon and negotiate with Natera toward a stipulation not to object to it. Nearly four months
22 ago, Sentieon made clear it was willing to sign a declaration stating that DNaseq and TNseq use
23 the same methods and mathematics as the Broad Institute's GATK software. But Invitae failed to
24 work diligently to prepare a draft declaration and resolve any objections from Natera. Instead, it
25 inexplicably delayed for 10 weeks, waiting until two days before the claim construction hearing to
26 circulate a draft declaration. Invitae offers no evidence whatsoever that it worked diligently to try
27 to secure Natera's agreement to not object to it. Acquiring an agreement from an opposing party
28 not to challenge evidence always takes negotiation and compromise. But instead of taking

1 meaningful steps toward negotiating any such agreement, Invitae apparently proposed it to Natera
2 at the eleventh hour on a “take it or leave it” basis. These are not “reasonable steps.”

3 Fifth, Sentieon could have utilized the procedures of Rule 31 to secure this evidence.
4 Rule 31 provides for deposition by written questions, and it does not require leave of the Court or
5 consent of the other parties. Under Rule 31, the parties serve written questions and the witness
6 reads his or her responses to a court reporter, who prepares a record. *See* Fed. R. Civ. P. 31(a)(3)
7 & (b). Courts in this district have required litigants to use Rule 31 when the alternatives are too
8 burdensome. *Jackson v. Bright*, WL 1101858, at *11 (N.D. Cal. Mar. 18, 2014) (denying oral
9 deposition in favor of deposition by questions).

10 On November 2, 2022, Sentieon’s counsel proposed a deposition by questions pursuant to
11 Rule 31 of the Federal Rules of Civil Procedure, stating that this would be an alternative to a written
12 declaration that would provide Invitae with the same testimony as the contemplated declaration but
13 would not require Natera’s consent to be used at trial. Byron Decl. ¶ 10. Counsel for Invitae
14 rejected this proposal, claiming that there was not enough time for this procedure. Counsel for
15 Sentieon disputed this claim, walking Invitae’s counsel through the language of Rule 31 to show
16 that if Invitae served the subpoena that day, it would be possible for written responses to be
17 provided by December 2, before the noticed hearing date on Invitae’s motion and well before
18 Invitae’s December 19 deadline to amend its infringement contentions. *Id.*

19 Rule 31’s plain language makes clear that there was time for a written deposition. Under
20 Rule 31, cross-questions are served 14 days after service of the deposition subpoena; redirect
21 questions are served 7 days later; and recross questions are served 7 days later. *Id.*; *see* Fed. R.
22 Civ. P. 31. Counsel for Sentieon represented that Sentieon was willing to provide written testimony
23 immediately after these deadlines. Byron Decl. ¶ 10. But Counsel for Invitae responded that he
24 ***simply did not want*** to use a Rule 31 deposition to prove Invitae’s case at trial. *Id.* Analogizing to
25 the use of interrogatories at trial, which he claimed presented difficulties, Invitae’s counsel refused
26 to consider anything short of production of source code and a deposition on the eight noticed
27 deposition topics. *Id.*

28 Finally, the timing of Invitae’s motion belies any claim Invitae took “reasonable steps” to

1 avoid undue burden on Sentieon. As discussed above, Invitae filed its motion at the last minute,
 2 after months of unexplained and inexcusable delay. Indeed, it filed its Motion *just seven days*
 3 before its then-operative deadline to finalize its infringement contentions. *See* ECF No. 1 (filed on
 4 October 25, 2022); Byron Decl. Ex. 2 (October 18, 2022 Claim Construction Order); *id.* Ex. 1 ¶ 16
 5 (deadline to finalize infringement contentions at 14 days after claim construction order—i.e., Nov.
 6 1, 2022). Then, rather than working to limit the burden of its Motion, it actively *increased the*
 7 *burden on Sentieon* by filing a motion to move up the hearing date to November 29, 2022 and
 8 threatening (but not filing) a motion to expedite Sentieon’s compliance with any resulting court
 9 order. ECF No. 6.⁶

10 As such, Invitae has completely failed to take “reasonable steps” to avoid imposing undue
 11 burden on Sentieon, which is grounds for denial of the motion to compel. *LegalZoom.com*, 2015
 12 WL 12832823, at *2 (denying motion to compel because movant failed to meet its burden of
 13 establishing that it took “reasonable steps” to avoid imposing an undue burden on non-party).

14 Moreover, where a party fails to comply with Rule 45(d) by failing to take reasonable steps
 15 to avoid imposing undue burden on a non-party, the Court “‘must enforce this duty and impose an
 16 appropriate sanction,’ which may include reasonable attorneys’ fees.” *Legalzoom.com, Inc. v*
 17 *Rocket Lawyer Inc.*, Case No. 15-mc-80003 NC (N.D. Cal. May 29, 2015) (quoting Fed. R. Civ. P.
 18 45(d)(1) (attached hereto as Byron Decl. Ex. 7) ; *see also LegalZoom.com v. Rocket Law, Inc.*, No.
 19 12-CV-00942 GAF, 2015 WL 12832823, at *2 (N.D. Cal. Mar. 23, 2015) (denying motion to
 20 compel because “LegalZoom has not met its burden of establishing that it took ‘reasonable steps’
 21 to avoid imposing an undue burden on non-party Google,” noting that “the Court must impose an
 22 appropriate sanction on a party or attorney responsible for issuing a subpoena that violates Rule
 23 45,” and providing a deadline of 14 days for a sanctions motion); *Hill v. Robert’s Am. Gourmet*
 24 *Food, LLC*, 2013 WL 5118943, at *4 (N.D. Cal. Sept. 13, 2013) (awarding sanctions and noting

25
 26 ⁶ Instead of filing this latter motion, Invitae apparently intends in its reply to ask the Court to order
 27 Sentieon to produce its source code *immediately*. *Id.* at 2 n.1. Invitae has provided no details about
 28 what precisely it intends to seek here, but more importantly, it is improper for Invitae to seek
 additional relief in its reply brief, and responding to this improper gamesmanship increases the
 burden on Sentieon.

1 that “sanctions are mandatory under Rule 45 when an issuing party does not take ‘reasonable steps
2 to avoid undue burden or expense’”); *In re NCAA Student-Athlete Name & Likeness Licensing*
3 *Litig.*, 2012 WL 4846522, at *1 (N.D. Cal. Aug. 7, 2012) (same);

4 This failure to act reasonably applies equally to Invitae’s deposition subpoena. As noted
5 above, rather than focus the noticed deposition topics on relevant information Invitae actually
6 needed or agree to narrow their focus, Invitae has taken a “shotgun” approach, making no
7 concessions whatsoever, much less attempt to acquire this information via less burdensome means
8 (such as from defendant Natera). Invitae has violated Rule 45 by refusing to limit the scope of
9 these deposition topics to avoid imposing undue burden on Sentieon. *Beaver Cnty. Employees’ Ret.*
10 *Fund v. Tile Shop Holdings, Inc.*, 2016 WL 7212308, at *1 (N.D. Cal. Dec. 13, 2016) (sanctioning
11 defendant for overbroad subpoena); *Resolute Forest Prod., Inc. v. Greenpeace Int’l*, 2021 WL
12 9038352, at *1 (N.D. Cal. Feb. 9, 2021) (magistrate judge did not err in sanctioning party for
13 overbroad subpoena); *Straight Path IP Grp., Inc. v. Blackberry Ltd.*, 2014 WL 3401723, at *7 (N.D.
14 Cal. July 8, 2014) (quashing burdensome subpoena and awarding sanctions).

15 Invitae has already subjected Sentieon to tens of thousands of dollars of attorneys’ fees and
16 squandered the valuable time of a small company with its overbroad and burdensome subpoenas.
17 Pursuant to Rule 45, Sentieon respectfully requests the Court make a finding that Invitae has
18 violated its burden of establishing it took reasonable steps to avoid imposing an undue burden on
19 Sentieon and either issue an order to show cause why sanctions should not issue or set a deadline
20 for Sentieon’s motion for sanctions.

21 **VI. CONCLUSION**

22 For the foregoing reasons, Sentieon respectfully requests the Court deny Invitae’s motion
23 to compel and either issue an order to show cause why sanctions should not issue or set a deadline
24 for Sentieon’s motion for sanctions.

1 Dated: November 8, 2022

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2
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